DOCUMENT RESUME

ED 046 512 PS 004 117

AUTHOR Harris, Mary B.
TITLE Models, Norms and Sharing.
INSTITUTION New Mexico Univ., Albuquerque. Coll. of Education.
SPONS AGENCY National Institutes of Health (DHEW), Bethesda, Md.
PUB DATE [70]
NOTE 15p.

EDRS PRICE EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS Age Differences, Grade 3, Grade 5, Imitation, *Interpersonal Competence, *Interpersonal Relationship, *Norms, *Research Methodology, *Social Behavior
IDENTIFIERS Altruism, Sharing

ABSTRACT

To investigate the effect of modeling on altruism, 156 third and fifth grade children were exposed to a model who either shared with them, gave to a charity, or refused to share. The test apparatus, identified as a game, consisted of a box with signal lights and a chute through which marbles were dispensed. Subjects and the model played the game twice. The first time the model won and disposed of prize marbles in one of three ways. The second time the subject won and was free to dispose of or save prize marbles. The subjects' subsequent sharing with the model, sharing with Mental Health or a Toys for Tots charity, or their refusal to share was observed through a one-way mirror in the test van. Subjects also responded to a questionnaire designed to assess the salience of a norm of altruism. Both specific and generalized imitation of altruism were found and salience of sharing appeared to be strongly related to actual sharing and weakly related to experimental conditions. (Author/WY)

ED046512

U. S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

MODELS, NORMS AND SHARING

Mary B. Harris

University of New Mexico

PS004117

In the past several years, many research studies have attempted to investigate some of the factors mediating altruistic behaviors. In particular, the effects of observing a model upon children's subsequent sharing have been investigated in several recent studies (Bryan & London, 1970; Bryan & Walbek, 1970a, 1970b; Harris, 1970; Hartup & Coates, 1967; Midlarsky & Bryan, 1967; Rosenhan & White, 1967). Neither direct nor vicarious reinforcement appears necessary for the elicitation of such sharing, as in many of these studies the children shared under conditions in which they believed their generosity to be unknown. Moreover, it has been shown that the effect of a model's actual deeds is far greater than that of his verbal comments (Bryan & Walbek, 1970a).

One explanation for the effect of observing a generous model is that seeing the model reminds the child of the appropriateness of an internalized norm of social responsibility (Berkowitz & Daniels, 1963) or of giving (Leeds, 1963). Some evidence that children do indeed hold such a norm is suggested by the report of Bryan & Walbek (1970a, b) that children do indeed verbally report that sharing is desirable and recommend it to other children. However, the evidence does not exist, as Berkowitz & Daniels (1963) have postulated, that increased salience of this norm is the factor responsible for the increase in generosity following exposure to an altruistic model. The

research by Bryan & Walbek (1970a, b) indicates in fact that neither the model's verbalizations nor the subject's own preachings were significantly correlated with his donations, although both might be expected to correlate with salience of the social responsibility norm. The present study attempted more directly to assess whether or not increased salience of this norm is indeed responsible for the facilitating effect of observing an altruistic model, by assessing indirectly through a questionnaire the salience of sharing for the child. If salience is indeed the mediating factor, one would expect it to be correlated both with the model's behavior and with the child's subsequent generosity.

Another possible interpretation of the modeling effect on altruism is that true generosity is not involved; rather, what occurs is a very specific imitation of the modeled behavior, which can be explained in terms of demand characteristics of the experiment, learning the rules of the game, or simply an innate or learned tendency for children to imitate adults. Very few of the studies on sharing, with the exception of one by Midlarsky & Bryan (1967), which did find some generalized altruism, have attempted to investigate the generality of the sharing response. Most studies, moreover, have permitted the subject only a dichotomous choice of whether or not to share, which makes it difficult to assess more subtle modeling effects. A previous study by the author (Harris, 1970) which provided children the option of sharing with either charity or the model while unobserved indicated that, although amount of sharing was unaffected by whether the

child had previously been the recipient or observer of sharing, he tended to imitate the model's behavior in determining whether and with whom he shared. These results are consistent with both a social norm interpretation and a specific imitation explanation of sharing. The fact that subjects receiving chips from the model were subsequently no more generous than those who merely observed her share made it possible, however, to reject the idea that a reciprocity norm (Gouldner, 1960) was affecting sharing in this instance. The present study attempted to assess whether or not the child is simply imitating the model's specific response or demonstrating a more generalized altruism by replicating the alternatives of the Harris (1970) experiment with the addition of an unappealing charity to which the model donated.

Third and fifth grade children were exposed to a model who shared with either a Mental Health charity container, with the child, or not at all. Their own subsequent sharing with the model, Mental Health, the presumably more appealing Toys for Tots charity, or no one, was observed, unknown to the subjects. It was predicted that generalized imitation of altruism would indeed occur, such that children who had seen the model share with Mental Health would indeed be more likely to share with Toys for Tots than those who had not.

The specific hypotheses of the study were therefore as follows:

1) Salience of the social responsibility norm, as measured by the child's first spontaneous mention of sharing on a questionnaire, will be greater in the conditions in which the

model shares than in a control condition.

2) Salience of the social responsibility norm will be greater for children who share than for those who do not.

3) Children in the model-shares-with-charity (MSC) condition will share more chips with Mental Health than those in the other conditions.

4) Children in the MSC condition will share more chips with Toys for Tots than those in the other conditions.

5) Children in the model-shares-with-subject (MSS) condition will share more chips with the model than those in the other conditions.

6) The total number of chips shared will be greater in both experimental conditions than in the control (no sharing) condition.

7) As previous studies have consistently found, fifth grade children will share more chips than third grade children.

Method

The procedures and apparatus of the study were very similar to those used by Harris (1970).

Subjects, model, and experimenter. The subjects were 156 third and fifth grade boys and girls from two Albuquerque public schools. A young woman served as the model (M). She was identified by different names and dressed in different clothes, so that the subjects would not identify her as the same person each time. A female graduate student experienced in dealing with children served as the E.

Equipment and apparatus. The study was conducted in a trailer parked on the school grounds. The apparatus, identified as a game, consisted of a yellow box with large red and green signal lights, 9 smaller lights which flashed in random patterns, and a chute through which marbles were dispensed. The signal lights indicated whose turn it was and the smaller lights marked the individual trials. Both sets of lights and the marble dispenser were operated by remote control from another room in the trailer. Marbles dispensed in the first part of the game were pink and those in the second part were green.

The apparatus was positioned on a table in front of a one-way mirror, so that E could observe the apparatus, S, and M from the adjoining room. Four small glass jars to collect the chips won by M and S in Parts I and II of the study rested on the table, along with a cyclindrical box labeled Mental Health and a rectangular box covered with pictures of appealing children and labeled Toys for Tots.

Procedure. The details of the procedure are described more fully in Harris (1970). Ss were run individually by E, who explained to S and M that she was testing a new game, in which each of them could win marbles when his signal lights were on. They were informed that their marbles could be traded in for prizes later on and that the person who won the most marbles could share, if he chose, with the other person, with Mental Health, or with some poor children who did not have many toys. E then left the room to turn on the apparatus and "do some work."

PS 004117

During this phase of the experiment (Part I) M won by far the most marbles and either gave five marbles to the subject, shared five marbles with Mental Health, or kept all her marbles. In all conditions the number of marbles won by M and S was arranged so that S always ended up with 15 marbles and M with 20.

Immediately after M had shared or not, E returned, showed S and M how to deposit their jars of marbles in opaque bags, and informed them that they would now be playing the game again, this time for green marbles, exchangeable for different prizes. E reminded them that the one winning the most marbles could share and asked them to notify her after the game was all over and they had put away their marbles. During this time, M remarked that she was in a hurry and hoped it wouldn't take long, to provide a rationale for her later abrupt departure.

After E had left the room, S and M received marbles on the same predetermined schedule in all conditions, one in which S received 25 marbles and M only three. After M's last trial, when S had one more turn, she looked at her watch and rushed off, asking S to please put away her marbles and apologize to E. All Ss continued gathering their marbles for the last trial and put them away before notifying E that they were through.

After reentering the room and hearing S's explanations of M's departure, E then asked a predetermined series of questions. The E began with asking whether S had enjoyed the game and whether he thought M had enjoyed it and if other adults and children would enjoy it. The four crucial questions, embedded in the middle of the interviews, were, "Did you

understand the rules?" "Can you tell me what they were?" "Do you remember what you could do with the marbles?" and "What were you supposed to do with the marbles?" Other questions about the lights and patterns followed; Ss were asked if they had guessed that the patterns were controlled by a computer and were asked to try to help think of a name for the game. The purpose of the latter sequence of questions was to divert the S from the idea of sharing (never mentioned by E), so that if he did later discuss the experiment with others, it would not be mentioned. All Ss were requested very strongly not to mention the project to others who had not yet had a turn and were told that a man would come to pick up their marbles and bring them their prizes after everyone had played the game.

Results

The mean number of marbles shared with Mental Health (MH), Toys for Tots (TT) and the model (M) in the different conditions are shown in Table I.

- - - - - - - - - - - - - - - - - -

Insert Table I About Here

- - - - - - - - - - - - - - - - - -

A Kruskal-Wallis one way analysis of variance across all twelve groups revealed significant differences in the number of marbles shared with Mental Health ($H = 24.47$, $p<.02$, d.f. = 11) and with the model ($H = 59.33$, $p<.001$, d.f. = 11) as well as in the total number of marbles shared ($H = 57.35$, $p<.001$, d.f. = 11), with the differences in the number of marbles shared with Toys for Tots reaching only a borderline significance level ($H = 18.42$, $p<.10$, d.f. = 11). Collapsing across age/sex categories, the three experimental conditions differed on the measures of donations to Mental Health, the model, and total sharing at the $p<.001$ level and on donations to Toys for Tots at the $p<.01$ level.

Mann-Whitney U tests were conducted between pairs of experimental conditions on the measures of total marbles shared, marbles shared with M, marbles shared with MH, marbles shared with TT, and marbles shared with MH + TT. On all measures but marbles shared with TT, Ss in the control group shared significantly fewer marbles than Ss in either of the two experimental conditions at the $p<.04$ level or beyond, using two-tailed tests; however the MSS group differed from the control condition on the measure of chips shared

with TT at only the $p<.06$ level, two-tailed. Comparisons of the two experimental conditions revealed that Ss in the MSC condition shared significantly more marbles with MH and with MH + TT than Ss in the MSS condition, although not significantly more with TT; Ss in the MSS condition shared significantly more marbles with the model and also a significantly greater total number of marbles than Ss in the MSC condition.

On all four measures of sharing (including total marbles shared), Mann-Whitney U tests revealed that fifth grade children shared significantly more marbles than third grade children at the $p<.03$ level or beyond. No significant sex differences on any of the measures were found.

Inspection of the questionnaire data revealed that most Ss who mentioned sharing did so in response to the question, "Do you remember what you could do with the marbles?" Therefore, the data were trichotomized by whether the S mentioned sharing before that question, during or after it, or not at all.

The numbers of Ss in each category who did and did not share are presented in Table II.

- - - - - - - - - - - - - - - - -

Insert Table II About Here

- - - - - - - - - - - - - - - - -

Chi square tests revealed that the number of Ss who mentioned sharing at each point did not differ significantly for the three experimental conditions, although the relationship did reach a borderline level of significance

(χ^2 = 8.60, 4 d.f. $p<.10$). The relationship between mention of sharing and actual sharing was significant at the $p<.02$ level (χ^2 = 8.29, d.f. = 2, $p<.02$).

Discussion

The data clearly support the hypothesis of a very strong effect of observing a model upon subsequent sharing. Ss who observed a model refuse to share gave fewer marbles to the model and to both charities than Ss who either observed a model share with Mental Health or received marbles from her. A more specific modeling effect was also observed, in that Ss in the MSS condition subsequently shared more with her than Ss in the MSC condition and Ss in the MSC condition subsequently shared more with MH and with MH + TT than Ss in the MSS condition. The difference in marbles given to TT, although in the predicted direction, did not reach statistical significance, however, failing to confirm Hypothesis 4 and suggesting again the specificity of the imitative response. Nevertheless, the fact that the control group shared less on all measures indicates that there was indeed some generalized imitation of altruism rather than simply direct imitation.

The questionnaire data indicate tentative support for the hypothesis that salience of the norm of altruism does mediate sharing. There was a tendency for Ss observing a generous model to mention sharing earlier, although it did not reach statistical significance, and Ss who shared were subsequently more likely to spontaneously mention sharing than those who did not. It is possible, of course, that it is the act of sharing which makes the social responsibility norm more salient to the child, rather than vice versa, as the interview was administered after the chance to share rather than before, so as not to affect the subject's sharing.

In opposition to previous results (Harris, 1970), the data do provide some support for the notion of a reciprocity norm as affecting altruism, since subjects in the MSS group were subsequently more generous than Ss in the MSC group. Thus it seems possible that more than one social norm may serve to mediate sharing.

The effects of modeled behavior on sharing would appear from this study to be both specific and generalized. It is clear that not only is general altruism imitated, so that subjects observing a generous model share more even with those to whom the model does not donate but that specific details of with whom one shares are also imitated. The role of norms in mediating this sharing is not completely clear, but the evidence is in favor of the interpretation that increased salience of a norm of altruism and possibly of a norm of reciprocity may indeed mediate the modeling effect.

References

Berkowitz, L., & Daniels, L. Responsibility and dependency. Journal of Abnormal and Social Psychology, 1963, 66, 429-436.

Bryan, J. H., & London, P. Altruistic behavior by children. Psychological Bulletin, 1970, 73, 200-211.

Bryan, J. H., & Walbek, N. H. Preaching and practicing self-sacrifice: Children's actions and reactions. Child Development, 1970, 41, 329-353.

Bryan, J. H., & Walbek, N. H. Determinants of conformity: The impact of words, deeds, and power upon children's altruistic behavior. Unpublished manuscript, Northwestern University, 1970b.

Gouldner, A. W. The norm of reciprocity: A preliminary statement. American Sociological Review, 1960, 25, 161-178.

Harris, M. B. Reciprocity and generosity: Some determinants of sharing in children. Child Development, 1970, 41, 313-328.

Hartup, W. W., & Coates, B. Imitation of peers as a function of reinforcement from the peer group and the rewardingness of the model. Child Development, 1967, 38, 1003-1016.

Leeds, R. Altruism and the norm of giving. Merrill-Palmer Quarterly, 1963, 9, 229-240.

Midlarsky, E., & Bryan, J. H. Training charity in children. Journal of Personality and Social Psychology, 1967, 5, 408-415.

Rosenhan, D., & White, G. M. Observation and rehersal as determinants of prosocial behavior. Journal of Personality and Social Psychology, 1967, 5, 424-431.

Footnotes

[1]This research was supported in part by research grant HEW-MH-17542 from the National Institutes of Health. Thanks are expressed to Carole Rothberg, who served as the experimenter, and to the staff and students of Monte Vista School and Bandelier School.

TABLE I

MEAN NUMBERS OF CHIPS SHARED

	Third Grade Boys	Third Grade Girls	Fifth Grade Boys	Fifth Grade Girls
Condition: MSC				
Shared With: MH	.69	.92	1.46	1.54
TT	.23	1.23	1.23	2.62
M	.00	.92	1.46	1.15
Total	.92	3.07	4.15	5.30
Condition: MSS				
Shared With: MH	.46	.15	.54	1.00
TT	.46	.15	.62	2.23
M	3.30	3.61	6.15	5.38
Total	4.23	3.92	7.31	8.62
Condition: MRS				
Shared With: MH	.38	.07	.30	.15
TT	.23	.07	.69	.15
M	0	.00	.15	.46
Total	.61	.15	1.15	.77

TABLE II

MENTION OF SHARING BY SUBJECTS

WHO DID AND DID NOT SHARE

	Shared	Did Not Share
Before Question 8	26	14
Question 8 or After	35	54
No Mention	10	17

$\chi^2 = 8.29,\ p < .02$